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Group Art Unit: 2774

Examiner: Marc-Coleman Marthe

1. An apparatus, comprising:

a display displaying a user interface element having a use orientation; sensors coupled to said display and sensing a spatial orientation of said display;

and

a display processor adjusting the use orientation of the user interface element relative to the spatial orientation as the spatial orientation changes with the use orientation remaining fixed with respect to a user orientation reference as the spatial orientation changes with respect to the user orientation reference.

8. An apparatus, comprising:

a flat panel display displaying a user interface element having a use orientation; a turntable coupled to said display and allowing said display to rotated sensors coupled to said display and determining a rotation orientation of said

display;

an input device integrated with the display allowing the user to input by interacting with the display; and

a display processor coupled to said display, said sensors and said input device, adjusting the use orientation of the user interface element relative to the spatial orientation as the spatial orientation changes with the use orientation remaining fixed with respect to a user orientation reference as the spatial orientation changes with respect to the user orientation reference, aligning a work image on said display to the spatial orientation and executing an interface function responsive to an interface input for the user interface element made relative to the oriented user interface element.

### 9. An apparatus, comprising:

a display monitor allowing a work image to change orientation <u>corresponding to</u> a change in orientation of said display monitor with respect to a user orientation reference

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while interface elements remain in a fixed orientation with respect to [a] the user orientation reference.

### 10. An apparatus, comprising:

a display monitor adapted to allow continuous change in orientation and present a displayed image; and

a display control system sensing the continuous orientation change of the display monitor and adapting the displayed image to the continuous orientation change with a use orientation of the display remaining fixed with respect to a user orientation reference as a spatial orientation of the display changes with respect to the user orientation reference.

## 11. An apparatus, comprising:

a display monitor adapted to allow continuous change in orientation; and a software based system sensing the continuous orientation change of the display monitor and adapting the functions performed to the continuous orientation change with a use orientation remaining fixed with respect to a user orientation reference as a spatial orientation changes with respect to the user orientation reference.

# 12. A method, comprising:

sensing spatial orientation changes of a display; and

changing a visual orientation of user interface element on the display relative to the display as the spatial orientation changes with the user interface element remaining fixed with respect to a user orientation reference as the spatial orientation changes with respect to the user orientation reference.

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13. A method of orienting a menu of a display, comprising:

determining a current three-dimensional <u>spatial</u> orientation of the display;

comparing the current orientation of the display to a user determined, fixed orientation reference and determining a difference;

setting a three-dimensional menu orientation of the menu relative to the difference;

mapping the menu onto the display responsive to the menu orientation with the menu orientation remaining fixed with respect to a user orientation reference as the spatial orientation changes with respect to the user orientation; and allowing a user to select from the menu.

14. A method as recited in claim 13, wherein [an] <u>a</u> work image on the display is aligned with the current orientation.

### 16. A method, comprising:

sensing [an] a spatial orientation of a display; and

adapting a function of the display to the orientation with the function of the display being aligned with respect to a user orientation reference while an image of the display is allowed to spatially change with respect to the user orientation reference as the spatial orientation of said display changes.

17. An apparatus, comprising:

[am]  $\underline{an}$  image display movable into different orientations and including a user interface; and

an orientation sensor coupled to said display and determining continuous orientations of the display as the display is moved, and said display maintaining orientation of the user interface with respect to a user <u>orientation reference</u> independent of physical position

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of a displayed image with respect to the user.

19. A method, comprising:

allowing a user to continuously change an orientation of a display;
determining the orientation of the display as the display continuously changes
orientations; and

maintaining an orientation of a user interface with respect to [the] <u>a</u> user <u>orientation reference</u> independent of physical position of the display <u>with respect to the user orientation reference</u>.

20. A computer readable media including a process sensing spatial orientation of a display and changing a visual orientation of a user interface element on the display relative to the display as the spatial orientation changes <u>maintaining an orientation of the element with respect to a user orientation reference as the spatial orientation of the display changes with respect to the user orientation reference.</u>

Please and the following new claim:

--21. (New) An apparatus, comprising:

a display displaying a display image, having a spatial orientation and a user interface element having a use orientation; and

means for decoupling the spatial orientation and the use orientation with the user interface element maintaining a fixed orientation as the spatial orientation changes.--

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